

XXI. *A description of the teeth of the Delphinus Gangeticus.*

By Sir Everard Home, Bart. V. P. R. S.

Read June 4, 1818.

THE *Delphinus Gangeticus* is described by the late Dr. ROXBURGH, in the seventh volume of the *Asiatick Researches*, published in 1781; but no farther account is given of its teeth, than that the number is 120, 30 in each jaw, nor have I met with any description of them in other publications. Dr. SHAW published his second volume of *General Zoology*, in which the whale tribe is mentioned, in 1801. He says, a narrow snouted dolphin is supposed to inhabit the Indian seas; but it is only known to us from specimens of the head and jaws. The jaws are extremely narrow, the teeth small, not numerous, distant, and shaped somewhat like the molares of quadrupeds. This description corresponds so ill with the teeth of the *Delphinus Gangeticus*, that it would almost induce us to believe that it is meant for those of another animal.

A specimen of the upper and lower jaw of the *Delphinus Gangeticus* was given to me, 17 years ago, by Sir JOSEPH BANKS, and has been deposited ever since in the HUNTERIAN Collection; but it was only the other day that an accidental reference to the *Asiatick Researches* led us to discover the animal to which they belong. The singularity of the teeth made it always a remarkable object, and now the animal is known, a description of them may not be undeserving the attention of this Society.

The jaws and teeth form the most remarkable characters of this species of delphinus, and a description of them will not only interest the naturalist and comparative anatomist, but will enable the geologist, when fossil teeth are found of this shape, readily to determine the species of animal to which they had belonged.

These teeth, as is common in those of the whale tribe, have the first rudiments formed in the gum, from which the tooth grows in both directions, upwards through the gum in the form of the point of a flattened cone which is coated with enamel, and downwards towards the jaw, increasing considerably in breadth but not in thickness, till it is at last embedded in the substance of the jaw itself; the lower portion has no enamel.

The appearance the teeth put on, as well as the mode of growth, will be seen in the annexed drawing; [Pl. xx.] the change that takes place in the form of the tooth as it wears away from long use, is more remarkable than in most other teeth; for the perfect tooth has a tolerably sharp enamelled point, while the half worn one has a curved blunted cutting edge. The teeth in front of the jaw are more like the incisors in other animals. The whole number in both jaws is 120, which exactly corresponds with that given by Dr. ROXBURGH, and identifies these jaws as belonging to the animal which he has described.

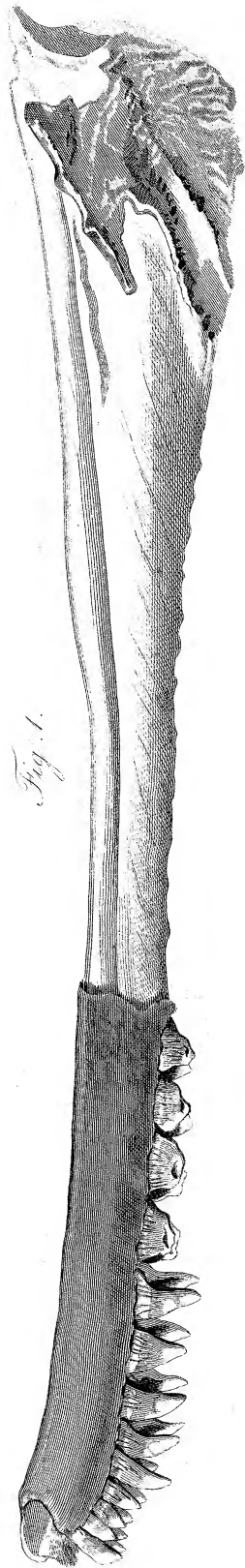
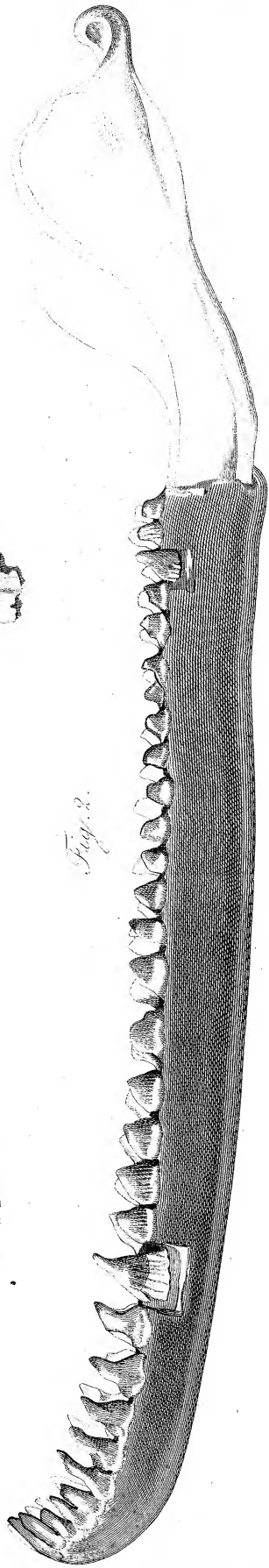
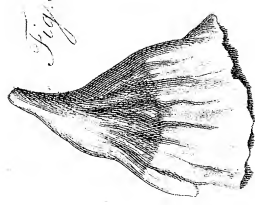


Fig. 4.



Fig. 3.



EXPLANATION OF PLATE XX.

Fig. 1. A side view of the upper jaw, to show the form of the teeth.

Fig. 2. The same view of the under jaw. Both these figures are on a scale of  $\frac{1}{4}$  inches to a foot.

Fig. 3. One of the most perfect of the teeth, of its natural size ; it is taken from the lower jaw.

Fig. 4. A tooth in its growing state, represented of the natural size, from the lower jaw.